

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/051245 A2

(51) International Patent Classification⁷: **A61F 2/46**,
A61B 17/16

PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(21) International Application Number:
PCT/GB2004/004537

(22) International Filing Date: 27 October 2004 (27.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0325277.2 28 October 2003 (28.10.2003) GB

(71) Applicant (for all designated States except US): **XIROS PLC** [GB/GB]; Springfield House, Whitehouse Lane, Leeds LS19 7UE (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SEEDHOM, Ba-haa, Botros** [GB/GB]; Springfield House, Whitehouse Lane, Leeds LS19 7UE (GB). **LORRISON, Jonathan, Charles** [GB/GB]; Springfield House, Whitehouse Lane, Leeds LS19 7UE (GB). **BRYANT, Julian** [GB/GB]; Springfield House, Whitehouse Lane, Leeds LS19 7UE (GB). **BEEVERS, David** [GB/GB]; Springfield House, Whitehouse Lane, Leeds LS19 7UE (GB).

(74) Agent: **ORR, William, Mclean**; Urquhart-Dykes & Lord LLP, Tower North Central, Merriam Way, Leeds LS2 8PA (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designation US
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
- of inventorship (Rule 4.17(iv)) for US only

Published:

- without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SURGICAL INSTRUMENTS FOR USE IN THE IMPLANTATION OF TISSUE REPAIR KIT

(57) Abstract: A set of surgical instruments for use in the implantation of a tissue repair kit (9, 11) after preparation of a bone site (1, 3, 5) having damaged tissue, in which damaged tissue is first removed and an annular groove (7) is formed around the defect site prior to application of the repair kit comprising a bio-compatible pad (9) to fit on the prepared bone site, and an overlying cover sheet (11) to fit in the groove, and the set of surgical instruments comprising: an introducer cylinder (44) having a hollow driving head (44a) at one end for introducing an outer portion (11a) of the cover sheet into the groove (7); a plunger (43) relatively slidable within the cylinder (44) and having a delivery end (43a) engageable with the cover sheet so as to move a main portion (11b) of the cover sheet towards the bone site with the outer portion (11a) of the cover sheet trailing behind the main portion; and a pad-receiving recess defined between the delivery end (43a) of the plunger (43) and the inner wall of the cylinder (44) so that a pad (9) can be introduced into the recess to overlie the main portion (11b) of the cover sheet (11); and a bone site preparation device (30) for removing damaged tissue from the bone site (1, 3) and for forming the annular groove (7) around the site prior to use of the introducer cylinder (44) and plunger (43).

WO 2005/051245 A2